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LADAS & PARRY 5670 WILSHIRE BOULEVARD, SUITE 2100 LOS ANGELES, CA 90036-5679			SHARMA, SUJATHA R	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/858,146
Filing Date: May 15, 2001
Appellant(s): WILCOCK ET AL.

MAILED

JUL 26 2006

Technology Center 2600

Robert Popa
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/16/06 appealing from the Office action mailed 1/13/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3-5,8-11,14,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cisneros [US 5,774,829] in view of Mannings [US 6,650,284].

Regarding claim 1,14 Cisneros discloses a positioning system, which uses uncoordinated beacon signals in conjunction with absolute positioning system. Cisneros further discloses a method of obtaining location data about a mobile entity for provision to a location-sensitive application, the method comprising:

- periodically obtaining location updates indicative of the current location of the mobile entity from a first source of location data; see col. 7, line 65 – col. 8, line 11
- location updates from said first source in dependence on the provision of location data indicative of the current location of the mobile entity from at least one other source of location data that operates independently of said first source and the location updates provided thereby; see col. 25, line 53 – col. 26, line 12

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However, Cisneros does not disclose a method of adaptively varying or extending the update interval between the location updates from said first source in dependence on the provision of location data indicative of the current location of the mobile entity from at least one other source of location data that operates independently of said first source and the location updates provided thereby.

Mannings, in the same field of endeavor, teaches a method of adaptively varying the frequency or interval of location updates based on the system conditions like size and nature of the overlay area and/or speed of the vehicle. See col. 15, lines 25-41.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the teachings of Mannings to Cisneros in order to avoid unnecessary updates and thus improve the transmission capacity.

Regarding claims 3-5 and 16-18, Cisneros as treated in claims 1,14 discloses all the limitations as claimed. However, he does disclose a method wherein the update interval increases with the speed of the moving object and therefore update interval is dependent on the accuracy of the location data received from at least one other source of location data.

Mannings, in the same field of endeavor, teaches a method wherein the update interval increases with the speed of the moving object and therefore update interval is dependent on the accuracy of the location data received from at least one other source of location data. See col. 15, lines 25-40.

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Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the teachings of Mannings to Cisneros in order to provide a more refined position of the mobile station.

Regarding claims 8,9, Mannings further discloses the update interval to be dependent on the current environment of the mobile entity. See col. 15, lines 25-40.

Regarding claim 10, Mannings further discloses a method wherein the environment information is derived from a map having regard to the current location of the mobile entity. See col. 2, lines 28-35, col. 12, lines 20-35 and 65-67.

Regarding claim 11, Mannings further discloses a method where the update interval is dependent on the progress of the location sensitive application. See col. 2, lines 28-35, col. 12, lines 20-67.

2. Claims 2,6,7,12,13,15,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cisneros [US 5,774,829] and Mannings [US 6,650,284] in view of Taft [GB 2 339 356 A].

Regarding claim 2,15 Cisneros as treated in claims 1, 14 disclose all the limitations as claimed. However he does not disclose a method where the one other source of location data is from short-range beacons.

Taft, in the same field of endeavor, teaches a method wherein the one other source of data being short-range location beacons. See Fig. 1; page 1, paragraph 4 ; page 2, paragraph 5 ; page 4, paragraphs 1,2,4,5.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the teachings of Taft to Cisneros in order to provide a more refined position of the mobile station.

Regarding claims 6,19, Taft further discloses the update intervals to be a function of the motion of the mobile object. See page 4, paragraphs 1,2,4,5.

Regarding claim 7, Taft further discloses a method wherein the frequency of updates increases with velocity of the mobile object. See page 4, paragraphs 1,2,4,5.

Regarding claim 12, Taft further discloses a method wherein the frequency of updates increases as the mobile object moves closer to the target location. See page 4, paragraphs 1,2,4,5.

Regarding claim 13, Taft further discloses the update interval to be dependent on motion of the mobile object and progress of the location sensitive application. See page 4, paragraphs 1,2,4,5.

(10) Response to Argument

The appellant argues (on pages 4-6) that there is no suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to meet the claim limitations. In particular the appellant argues the particular limitation in the claim i.e. the method of adaptively varying or extending the update interval between the location updates from said first source in dependence on the provision of location data indicative of the current location of the mobile entity from at least one other source.

The examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The examiner would like to bring the appellant's attention to the Cisneros reference first where he discloses a method of updating the location of the mobile unit based on two sources i.e. a beacon signal in conjunction with an absolute positioning system (see col. 3, line 14 – col. 4, line 33). However, Cisneros while mentioning the method of updating the position of the mobile unit is silent to disclose the interval of such updates.

Therefore the examiner relied on the secondary reference Mannings to overcome this deficit in Cisneros invention. Mannings is in the same field of endeavor since his invention also teaches a method of locating a mobile unit so that appropriate guidance information dependent on the location information can be transmitted to the mobile station. Mannings discloses a method of obtaining the location information from a single source (for example GPS) and storing it in a database.

Mannings further teaches a method of updating this stored location information at regular intervals, e.g. every two minutes or every kilometer (see col. 11, lines 61-65). In col. 15, lines 25-41, Mannings discusses the interval of updating. He clearly states that if the mobile is in the same overlay area when the next update message arrives, then the message is suspended i.e. there is no updating performed here. Also Mannings states that less frequent updates are appropriate on a long stretch of road covered by a single overlay i.e. implying that the interval of updates is extended in such a situation. Though, Manning does not explicitly say that frequent updates is unnecessary in such situation, it is clear to one with ordinary skill in the art that the location of the mobile unit stored in the database is not updated if it is in the same overlay area since nothing has changed in terms of the dynamics of the road situation and it would be unnecessary to update and waste the system resources.

Mannings further discloses that the updates to the stored location of the mobile unit can be done in response to the changing traffic situations, accidents or highway maintenance (see col. 8, lines 48-53). Thus the interval of the updates is changed according to the changing traffic situations, accidents or highway maintenance.

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By making this distinction between when and when not to update, Mannings is clear that this choice is motivated by some factor i.e. in this case frequency of updates is based on overlay changes or changing traffic situations, accidents or highway maintenance.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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